

1 14. The method of claim 12 wherein curing the composite is commenced while the
2 electrostatic field is being applied.

1 15. The method of claim 5 wherein applying an electrostatic field comprises
2 inserting at least one parallel plate capacitor in a bath containing the composite slurry;
3 adjusting the spacing of plates of the moving the plates of capacitor until the distance
4 between them is substantially equal to the desired thickness of the thermal intermediate;
5 connecting the plates of the capacitor to a voltage source
6 applying an electrostatic field to the slurry between the plates; and
7 removing the capacitor from the bath.

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16. A method of fabricating a thermal interface material, the method comprising:
preparing a slurry of carbon nanotubes in a liquid polymer;
dispensing the slurry onto a surface of a conveyor as a layer of unaligned carbon
nanotube composite;
applying an electrostatic field to the layer of unaligned carbon nanotube composite to
form an aligned carbon nanotube composite with the carbon nanotubes substantially
perpendicular to the conveyor; and
curing the aligned carbon nanotube composite.

1 17. The method of claim 16 further comprising subdividing the aligned carbon nanotube
2 composite into individual billets.

1 18. The method of claim 16 wherein applying the electrostatic field to the layer of unaligned
2 carbon nanotube composite is performed by placing opposing plates of a capacitor adjacent
3 opposing sides of the surface of the conveyor bearing the slurry.

1 19. Apparatus for forming a thermal interface structure, comprising:
2 a vat to store a slurry of carbon nanotubes in a liquid interstitial material;